

### Claims

1. A method for distributing discovery information in an IP multicast television network, comprising
  - multicasting offer information (701) linking a service provider offer description (offer 1, offer 2) and a service provider offer localisation ( $LN_{0,1}$ ,  $LN_{0,2}$ ) within the IP multicast network,
  - multicasting stream information (702, 703) at the service provider offer localisation, the stream information linking a multi service transport stream ( $TS_{1,1} - TS_{1,4}$ ,  $TS_{2,1} - TS_{2,3}$ ) and a stream localisation ( $LN_{1,1} - LN_{1,4}$ ,  $LN_{2,1} - LN_{2,3}$ ) within the IP multicast network.
2. A method according to claim 1, in which the offer and stream information are respectively cyclically multicast.
3. A method for broadcasting over an IP multicast network at least one offer of multimedia services received in form of a bundle of transport streams, comprising
  - attributing for each offer (offer 1, offer 2) a determined service provider offer localisation ( $LN_{0,1}$ ,  $LN_{0,2}$ ) within the IP multicast network,
  - creating a file of offer information (701) describing for each offer a relation to its attributed service provider offer localisation,
  - extracting, for each offer, transport stream information from its bundle, the transport stream information comprising a transport stream identification ( $TS_{1,1} - TS_{1,4}$ ,  $TS_{2,1} - TS_{2,3}$ ) for each transport stream,
  - attributing for each transport stream identification a determined stream localisation ( $LN_{1,1} - LN_{1,4}$ ,  $LN_{2,1} - LN_{2,3}$ ) within the IP multicast network,
  - creating for each offer a file of stream information (702, 703) describing for each transport stream a relation to its attributed stream localisation.
4. A method for broadcasting according to claim 3, further comprising
  - adding for each offer a service provider offer description in the file of offer information.
5. A method for broadcasting according to anyone of claims 3 or 4, wherein

- the extracting of transport stream information from its bundle comprises for each transport stream, extracting an original network Id for a network previously used to deliver the transport stream,  
and further comprising
  - inserting the original network Id in relation to the transport stream in the file of stream information.
6. A method for broadcasting according to anyone of claims 3 to 5, further comprising
- receiving for each transport stream a corresponding stream of packetized data and inserting the packetized data into IP packets,
  - multicasting the IP packets at the stream localisation previously attributed to the transport stream,
  - multicasting the file of offer information at a predetermined offer localisation ( $LN_{0,0}$ ),
  - multicasting for each offer the corresponding stream information file at the service provider offer localisation attributed to the offer.
7. A method according to claim 6, in which the files of offer and stream information are respectively cyclically multicast.
8. A method for receiving in a set top box receiver compliant to receive a bundle of transport streams and connected to an IP multicast network, a transport stream from a bundle, comprising
- obtaining multicast stream information (702, 703) from a service provider offer localisation,
  - processing the stream information to determine a stream localisation ( $LN_{1,1} - LN_{1,4}$ ,  $LN_{2,1} - LN_{2,3}$ ) previously attributed to the transport stream,
  - obtaining multicast IP packets from the stream localisation,
  - extracting packetized data from the obtained IP packets, thereby obtaining the transport stream.
9. A method for receiving in a set top box receiver compliant to receive a bundle of transport streams and connected to an IP multicast network, a transport stream from an offer among one or many offers in form of bundles, comprising
- Obtaining multicast offer information (701) from a predetermined offer localisation,

- Processing the offer information to obtain a determined service provider offer localisation ( $LN_{0,1}$ ,  $LN_{0,2}$ ) previously attributed to the offer,
- Obtaining multicast stream information (702, 703) from the determined service provider offer localisation,
- Processing the stream information to determine a stream localisation previously attributed to the transport stream,
- Obtaining multicast IP packets from the stream localisation,
- Extracting packetized data from the obtained IP packets, thereby obtaining the transport stream.

10. A method for receiving in a set top box receiver compliant to receive a bundle of transport streams and connected to an IP multicast network, a transport stream from an offer among one or many offers in form of bundles, comprising

- obtaining (800) multicast offer information (701) from a predetermined offer localisation ( $LN_{0,0}$ ),
- processing the offer information to obtain a list of items, each item relating a service provider offer localisation and an offer,
- obtaining (801), for each item, multicast stream information (702, 703) from the service provider offer localisation corresponding to the item,
- processing (801) the stream information to obtain a transport stream list (802) of transport streams and respectively related stream localisations,
- storing the transport stream list in the set top box.

11. A method for receiving according to claim 10, comprising

- requesting (900) a determined transport stream ( $TS_{x,y}$ ),
- finding (901) a stream localisation corresponding to the determined transport stream in the transport stream list (802),
- obtaining (902) multicast IP packets (903) from the stream localisation,
- extracting (904) packetized data from the obtained IP packets, thereby obtaining the determined transport stream (905).

12. A method for broadcasting over an IP multicast network at least one offer of multimedia services received in form of a bundle of transport streams, comprising

- Receiving for each transport stream a corresponding stream of packetized data and inserting the packetized data into IP packets,
- Multicasting the IP packets for each transport stream respectively at a determined stream localisation.